

ABSTRACT

The present invention provides a method and apparatus for free space optical communication. The method and apparatus transmit a large diameter optical signal across a free space link to over fill a plurality of receive objectives. Each of receive objectives focus the portions of the impinging optical signal into a respective fiber optic core, where the fiber optic is a single mode, multi-mode, small multi-mode or other type of fiber. The signals in each of the respective fibers are combined to obtain a single received signal. The apparatus and method further provide wavelength conversion, power adjustment, and further maintains alignment between cooperating transceivers.